

REMARKS

The Office Action dated November 27, 2006 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-17 and 19-44 have been amended to particularly point out and distinctly claim the subject matter which is the invention. No new matter has been added. Claims 1-44 are submitted for reconsideration.

Claims 14 and 31 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. Claims 14 and 31 have been amended to overcome this rejection. Therefore, Applicant requests that the rejection be withdrawn.

Claims 1, 3, 6, 11, 13, 15-18, 21, 23, 28-30, 32-41 and 43 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,865,169 to Quayle (hereinafter Quayle) in view of U.S. Patent No. 6,915,131 to Hamada (hereinafter Hamada). According to the Office Action, Quayle teaches all of the elements of the claims except for the connecting step recited in the claims. Therefore, the Office Action combined Quayle with Hamada to yield all of the elements of claims 1, 3, 6, 11,-13, 15-18, 21, 23, 28-30, 32-41 and 43. The rejection is traversed as being based on references that do not teach or suggest the combination of elements recited in claims 1, 3, 6, 11,-13, 15-18, 21, 23, 28-30, 32-41 and 43.

Claim 1, upon which claims 2-17 depend, recites a method including forming a connection between a base station and a mobile station of a mobile communication system and requesting for allocation of information transfer capacity to the mobile station. The method also includes connecting the mobile station to a service site formed by a remote station of the base station, with the service site being located inside the cell formed by the base station. The service site uses the same radio interface as the cell, and provides the mobile station with higher information transfer capacity than the cell. The remote station is controlled by the base station, and the traffic of the remote station being routed via the base station. The method further includes transferring information by using the service site.

Claim 18, upon which claims 19-44 depend, recites a mobile communication system including a base station for providing a mobile station with radio transmission and reception and a mobile station connected to the base station for providing a user of the mobile station with access to the mobile communication system. The system also includes a base station control unit for controlling the radio connection between the base station and the mobile station. The base station includes a main station for forming a cell. The base station also includes a remote station connected to the main station for providing the mobile station with radio transmission and reception. The remote station is configured to use the same radio interface as the main station and the remote station is configured to form a service site inside the cell, the service site providing the mobile station with higher information transfer capacity than the cell.

As outlined below, the cited references of Quayle and Hamada do not teach or suggest the combination of features recited in claims 1, 3, 6, 11,-13, 15-18, 21, 23, 28-30, 32-41 and 43.

Quayle discloses that a plurality of subscribers, each having a directly attached antenna, communicates in a frequency band with a nearby cellular base station. The system of Quayle includes techniques for operating in small allocations of radio spectrum, providing high system capacity, providing high speed service to subscriber terminals located inside of buildings, routing of backhaul transmissions through adjacent or nearby base stations, interference reduction techniques, distributed core network functions, tiering of subscriber service speeds and enhanced time division duplex modes to allow operation for transmission and reception on a single frequency. See at least Col. 1, lines 56 – Col. 2, line 15 and Col. 4, lines 8-40 of Quayle.

Hamada discloses a communication method of forming a service zone with a plurality of wireless cells which are formed by a plurality of wireless base stations connected to a wireless line control device through a wired communication network. The method includes performing a wireless connection with a wireless terminal existing in the service zone and specifying each wireless terminal, using information other than the unique terminal information for specifying each wireless terminal. At a time when an arbitrary one of the plurality of wireless terminals forms a wireless link with an arbitrary one of the plurality of wireless base stations, the arbitrary wireless base station forms and allocates base station identification information other than the unique terminal

information for specifying the wireless terminal on the basis of a predetermined condition.

Applicant submits that the combination of Quayle and Hamada does not teach or suggest the combination of features recited in claims 1, 3, 6, 11,-13, 15-18, 21, 23, 28-30, 32-41 and 43. The Office Action alleged that Quayle discloses requesting for allocation of information transfer capacity to the mobile station, as recited in claim 1. However, there is no teaching in Quayle of such feature. Furthermore, Quayle does not teach or suggest connecting the mobile station to a service site formed by a remote station of the base station, the service site being located inside the cell formed by the base station, the service site using the same radio interface as the cell, the service site providing the mobile station with higher information transfer capacity than the cell, the remote station being controlled by the base station, and the traffic of the remote station being routed via the base station, as recited in claims 1 and 18.

Hamada does not cure any of the deficiencies of Quayle, as noted above. In Hamada, a service zone is formed with a plurality of wireless cells which are formed by a plurality of wireless base stations connected to a wireless line control device through a wired communication network. There is no teaching or suggestion in Hamada of forming a service site by a remote station of the base station, the service site being located inside the cell formed by the base station, the service site using the same radio interface as the cell, as recited in the presently pending claims. There is also no teaching or suggestion in Hamada of the service site providing the mobile station with higher information transfer

capacity than the cell, the remote station being controlled by the base station, and the traffic of the remote station being routed via the base station, as recited in claims 1 and 18. In fact, in Hamada, there is no discussion of a remote station which is controlled by a base station and which is located inside of the cell formed by the base station. Therefore, Applicant asserts that the rejection under 35 U.S.C. 103(a) should be withdrawn because neither Quayle nor Hamada, whether taken singly or combined, teaches or suggests the combination of features recited in claims 1 and 18, and hence dependent claims 3, 6, 11,-13, 15-17, 21, 23, 28-30, 32-41 and 43 thereon.

Claims 2, 4-5, 7-8, 9-19, 14, 24-27, 31, 42 and 44 were rejected under 35 U.S.C. 103(a) as being unpatentable over Quayle in view of Hamada, and further in view of U.S. Patent Publication No. 2002/0136174 to Gleeson (hereafter Gleeson). According to the Office Action, Quayle and Hamada teach all of the elements of the claims except for detecting in the mobile station, before requesting for allocation of information transfer capacity to the mobile station, a need to allocate information transfer capacity to the mobile station. Thus, the Office Action combined Gleeson with Quayle and Hamada to yield all of the elements of claims 2, 4-5, 7-8, 9-19, 14, 24-27, 31, 42 and 44. The rejection is traversed as being based on references that do not teach or suggest the combination of features recited in claims 2, 4-5, 7-8, 9-19, 14, 24-27, 31, 42 and 44.

Quayle and Hamada have been discussed above. Each of claims 2, 4-5, 7-8, 9-19, 14, 24-27, 31, 42 and 44 depend on one of independent claims 1 and 18 and therefore incorporate all of the elements of claims 1 and 18. Gleeson does not cure the deficiencies

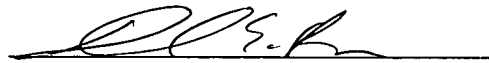
of Quayle and Hamada, as outlined above. Specifically, Gleeson does not teach or suggest connecting the mobile station to a service site formed by a remote station of the base station, the service site being located inside the cell formed by the base station, the service site using the same radio interface as the cell, the service site providing the mobile station with higher information transfer capacity than the cell, the remote station being controlled by the base station, and the traffic of the remote station being routed via the base station, as recited in claims 1 and 18. Therefore, Applicant asserts that the rejection under 35 U.S.C. 103(a) should be withdrawn because neither Quayle, Hamada nor Gleeson, whether taken singly or combined, teaches or suggest the combination of features recited in claims 1 and 18, and hence dependent claims 2, 4-5, 7-8, 9-19, 14, 24-27, 31, 42 and 44 thereon.

As noted previously, claims 1-44 recite subject matter which is neither disclosed nor suggested in the prior art references cited in the Office Action. It is therefore respectfully requested that all of claims 1-44 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



Arlene P. Neal

Registration No. 43,828

David E. Brown

Reg. No. 51,091

Customer No. 32294

SQUIRE, SANDERS & DEMPSEY LLP

14TH Floor

8000 Towers Crescent Drive

Tysons Corner, Virginia 22182-2700

Telephone: 703-720-7800

Fax: 703-720-7802

APN:jf:jk